tests) were based on official reimbursed prices. **RESULTS:** Out of 4,934 newly diagnosed breast cancer women, 27.5% (1,357) were appropriate for the test application. Only 35% of the women undertaken the oncotype test (N=1,357) were found as high risk for recurrence (N=475). The average total cost of chemotherapy treatment was estimated to €8,271 from which more than 80% refer to pharmaceuticals. The total treatment cost for women who didn't undertake the test reached to €10.9 mil., while the relevant cost for women who undertook the test was estimated to €8 mil. **CONCLUSIONS:** The introduction of Oncotype DX® to the Greek health care system had as a result annual cost savings of almost €3 million and avoidance of unnecessary chemotherapy treatment (and associated complications) to more than 880 women.

PCN97

COST CONSEQUENCE MODEL INVESTIGATING THE IMPACT OF BOWEL CLEANSING ON PREVENTION OF COLORECTAL CANCER IN A GERMAN SCREENING POPULATION

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OBJECTIVES: The degree of benefit from colonoscopy in the prevention of colorectal cancer (CRC) is highly dependent on the quality of bowel cleansing. In a randomized study of patients undergoing screening colonoscopy in Germany (MODEC), 2L polyethylene glycol with electrolytes + ascorbate components (PEG+ASC) resulted in numerically higher overall polyp/adenoma detection rates (PDR/ADR) and significantly higher right-sided PDR/ADR than sodium picosulfate/magnesium citrate (NaPic/MgCit), together with better bowel cleansing. The objective of the model was to examine the socioeconomic impact of bowel cleansing quality on the effectiveness of CRC screening in the eligible German population. **METHODS:** A cost-consequence model was constructed to compare the total cost of colonoscopy and treatment of subsequent CRC over a 10-year period in a cohort of 10,000 patients aged ≥55 years receiving 2L PEG+ASC or NaPic/MgCit prior to colonoscopy. The rates of successful bowel cleansing, completed colonoscopies, and PDR/ADR were obtained from the MODEC study. Published rates of surveillance colonoscopy, associated costs and health care resource utilization in Germany were used, with costs inflated to 2013 prices. **RESULTS:** The model predicts that the use of 2L PEG+ASC versus NaPic/MgCit increases the average per patient cost associated with colonoscopy by €67. However, better bowel cleansing and numerically higher overall PDR/ADR achieved using 2L PEG+ASC rather than NaPic/MgCit avoids progression to CRC in 166 patients, due to early detection, equating to an average per patient saving in CRC treatment costs of €488. The model shows that the use of 2L PEG+ASC versus NaPic/MgCit at screening/surveillance colonoscopy leads to an average overall cost saving of €420 per patient over 10 years. **CONCLUSIONS:** Modeling of long-term outcomes shows that using an effective bowel cleansing preparation in CRC screening may reduce the number of patients developing CRC, and may lead to reduced CRC treatment costs.

PCN98

A COST-CONSEQUENCE ANALYSIS OF HUMAN PAPILLOMAVIRUS VACCINATION IN ROMANIA

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OBJECTIVES: The objective of the study was to estimate the potential cost and epidemiological impact of a Human Papillomavirus (HPV) mass vaccination in Romania for the two available vaccines in the Romania: AS04 adjuvanted HPV16/18 vaccine (AS04V) and the HPV6/11/16/18 vaccine (QV). **METHODS:** We applied, to the Romanian settings, a population steady state model previously published with a one year time horizon estimating the effect (cases and costs) of a vaccination programme. The number of cases and costs (in RON – Romanian National Currency) were collected from the hospitalization Diagnosis Related Group database for the year 2012. cervical cancer (CC) and genital warts (GW) were considered. Vaccine effectiveness was approximated by weighting vaccine-type and non-vaccine-type efficacy with HPV distribution reported for GW (literature) and CC (HPV Centre) for each vaccine. One way sensitivity analysis was conducted on key input parameters. **RESULTS:** HPV vaccination would save17,706,490 RON with AS04V and 16,432,592 RON with QV. An additional 820 CC-related hospitalisations amounting to a cost difference of 1,273,898 RON was estimated in favour of the AS04V. A total of 205 cases of GW prevented and 153,395 RON associated costs were estimated in favour of the QV. The total cost difference amounted to 1,120,503 RON. Robustness of the results was confirmed by sensitivity analyses". **CONCLUSIONS:** Implementing the AS04V would result in >1 million RON saved versus the QV mainly due to a difference of extra 820 CC cases prevented that completely offsets the benefit associated with the prevention of GW. The observed difference is mainly due to higher protection associated with non-vaccine types for AS04V.

PCN99

ASSOCIATION OF HEALTH CARE COST WITH QUALITY OF LIFE FOR VARIOUS TYPES OF CANCERS

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OBJECTIVES: The new cancer treatment modalities are improving survival rates today and one of the main outcomes is the improved health related quality of life (QoL). Prolonged survival also increases the financial burden of cancer care on health care systems. In this study we aimed to analyze the associations between QoL and direct health care costs in different types of cancers. **METHODS:** We evaluated QoL (EORTC QLQ-C30) and direct medical costs (DMC) in 350 patients with lung (Lng), breast (Br), hematological (Hem), head and neck (H&N), colorectal (CR), gastric (Gas), gynecological (Gy), and prostate (Pr) cancers. The DMC data of each patient in the following 3-month period after QoL assessment was obtained from the hospital finance department database. DMC per QoL point was calculated by DMC/QoL score. **RESULTS:** Mean DMC per QoL was lowest in Pr, and highest in Hem cancers (ranged 60.1-195.1 TL/global QoL score) (Pr<Gy<CR≈Gas≈Br≈Lng≈H&N<Hem). QoL was lowest in Gy and highest in CR (ranged 53,1-65,2) (Gy<Lng<Pr<Br≈Hem≈H&NC). Total DMC ranged from 3124-13557 TL (Pr≈GY<Br<Gas≈CR<Lng≈H&N<Hem). Depending on the type of the cancer the association between DMC and QoL could be in different directions (the correlation between DMC and role functioning was positive in Gas, while it was negative in H&N cancer). **CONCLUSIONS:** For a fixed period of time the total DMC associated with the management of different types of cancers vary substantially. As expected the total cost does not however purchase equal amount of QoL for each type of cancer. For those cancers with higher DMC per QoL, we should consider implementing wider psychosocial support measures. Depending on the type of cancer DMC may reflect disease progression leading to decreased QoL, or it may reflect presence of an effective and aggressive management leading to increased QoL.

PCN100

COST-EFFECTIVENESS MODEL OF PERTUZUMAB IN COMBINATION WITH TRASTUZUMAB AND DOCETAXEL COMPARED WITH TRASTUZUMAB IN COMBINATION WITH DOCETAXEL FOR THE 1ST LINE TREATMENT OF HER2+ METASTATIC BREAST CANCER IN COLOMBIA

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OBJECTIVES: To evaluate the cost effectiveness of Pertuzumab plus Trastuzumab and docetaxel (PTD) vs. Trastuzumab and docetaxel (TD) for the first-line treatment in patients with HER2+ metastatic breast cancer in Colombia. **METHODS:** For the evaluation of the cost-effectiveness a health economic area under the curve model was developed. The model considers three health states: progression-free survival, disease progression and death. The proportion of patients in each health state were derived using patient level data from the CLEOPATRA trial like efficacy and safety results, with the exception where overall survival (OS) utilized data from longer term clinical registries. The primary model outcome is the ICER cost per QALY gained in the first-line PTD vs. TD. The following main model input data assumptions were applied for the base case analysis: Time horizon: 15 years; model cycle length: weekly; 3) reference prices for drugs in Colombia, except for Pertuzumab which was supplied by the manufacturer; 4) treatment duration: actual treatment duration from the CLEOPATRA study extrapolated using an exponential function; and 5) discount rates: annual rate of 3.0% for both, future costs and health benefits. **RESULTS:** The outcomes over a time horizon show an increase in mean OS time for patients assigned to the PTD group as compared to those in the TD of 0.72 years. Mean QALYs are also higher in the PTD group than in the TD group 0.58 QALYs. The addition of Pertuzumab leads to higher total average treatment costs of $143.529 dollars per patient compared to the TD group. These findings result in an ICER of $200.509 per life year gained and of $249.582 per QALY gained. **CONCLUSIONS:** When compared to commonly accepted cost-effectiveness thresholds, these results exceed commonly applied willingness-to-pay thresholds, but Pertuzumab becomes a therapeutic alternative that offers a better health outcome.

PCN101

COST-EFFECTIVENESS OF IPILIMUMAB FOR PREVIOUSLY UNTREATED PATIENTS WITH ADVANCED METASTATIC MELANOMA IN SPAIN

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OBJECTIVES: To assess the cost-effectiveness of ipilimumab compared to dacarbazine as first-line treatment in patients with advanced metastatic melanoma. **METHODS:** A three-state Markov (progression-free, progression and death) with three-week cycles model using the Spanish Healthcare System perspective was developed over a lifetime horizon. The clinical profile of ipilimumab (3 mg/kg) was obtained from a pooled dataset of chemotherapy naive patients from four phase II and phase III studies, and from the CA184-024 trial for dacarbazine. Parametric extrapolation methods were used to project survival over lifetime. Costs included were: drug acquisition (ex-factory price -7,5% mandatory rebate) and administration, medical/terminal care, and adverse events management. Unit costs were derived from Spanish health care cost databases (Euros, 2013). For drugs with a double-pricing system (like ipilimumab), costs were based upon the official notified prices in Spain. Costs and benefits were discounted at 3%. Utility values were taken from the CA184-024 trial. Univariate and probabilistic sensitivity analyses (PSA) were performed. **RESULTS:** The life years (LYs) and quality-adjusted life years (QALYs) gained with ipilimumab as first-line treatment over dacarbazine were 2.01 and 1.68, respectively. The incremental cost of using ipilimumab versus dacarbazine was 69,598 €. The incremental cost-effectiveness ratio (ICER) and the incremental cost-utility ratio (ICUR) were 34,566€/LY gained and 41,459€/QALY, respectively. PSA showed that ipilimumab is up to 100% and 90% likely to be cost-effective at the threshold established by the NICE for oncology drugs that meet 'End-of-Life' criteria (50,000-62,000€) for ICER and ICUR, respectively. Additionally, at the threshold acceptable in Spain (30,000-45,000€) the likelihood of ipilimumab being cost-effective is up to 94% and 66% for ICER and ICUR, respectively. **CONCLUSIONS:** Results suggest that ipilimumab is a cost-effective alternative for previously untreated patients with advanced metastatic melanomain Spain.

PCN102

THE POTENTIAL OF (TARGETED) MR COLONOGRAPHY AS A SCREENING TOOL FOR COLORECTAL CANCER: A COST-EFFECTIVENESS ANALYSIS

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OBJECTIVES: MR colonography may have potential as a colorectal cancer (CRC) screening tool since it has comparable test characteristics as colonoscopy but is less invasive. Furthermore, innovators in the field of MR technology are striv-